GIST OF PROJECTS CLEARED BY APEX COMMITTEE FOR HOLISTIC DEVELOPMENT OF AGRICULTURE & ALLIED SECTORS IN J&K AND THEIR LIKELY IMPACT

Agriculture Production Department

Government of Jammu & Kashmir

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BACKGROUND

Agriculture and allied activities are the mainstay of J&Ks rural economy. More than 70% of the population in J&K is directly or indirectly engaged in agriculture and allied occupations for their livelihood which makes the UT's economy mostly agriculture dependant. Most of the farmers in J&K are small and marginal with fragmented land holdings. Therefore, in order to transform the socio-economic status of people of J&K, sustainable & inclusive development of agriculture and allied sectors is need of the hour to increase income and create better livelihood opportunities for people of J&K.

The Government of J&K organised a Multi-Stakeholder Convention for holistic development of Agriculture & Allied Sectors in J&K on 18th -19th July, 2022. The two days convention primarily focused on transforming subsistence agriculture into knowledge-based and technology–driven sustainable agri-economy. The participants during the convention proposed area specific interventions with introduction of innovative technologies, new knowledge, IT interventions and infusion of capital to revamp the said sectors in UT of J&K besides promoting secondary agriculture, value addition, processing, branding & marketing of agricultural produce supported by agri-business innovations to create employment, secure fair standard of living for farmers and agricultural workers, discourage migration to urban areas and brace-up to the challenges arising out of globalization and climate change.

Consequent to the deliberations in the Convention, an Apex Committee, under the Chairmanship of Shri Mangla Rai, Former DG, ICAR was constituted by the General Administration Department, for framing a comprehensive Agriculture Policy for holistic development of Agriculture & Allied Sectors in UT of J&K. In this regard different Technical Working Groups were also framed for submission of necessary inputs to the Apex Committee.

UT LEVEL APEX COMMITTEE

The Composition of the UT Level Apex Committee is as under:

1	Dr. Mangla Rai, EX D.G. ICAR	(Chairman)
2	Dr. Ashok Dalwai, CEO, National Rainfed Area Authority, GoI	(Member)
3	Shri. Atal Dulloo, ACS, Agriculture ProductionDepartment	(Member)
4	Dr. P.K Joshi, Secretary, NAAS, New Delhi	(Member)
5	Dr. Prabhat Kumar, Horticulture Commissioner, Agriculture & Farmers Welfare Department	(Member)
6	Dr. H.S Gupta, EX Director, IARI	(Member)
7	Dr. J. P. Sharma, Vice Chancellor, SKUAST Jammu	(Member)
8	Dr. Nazir Ahmad Ganai, Vice Chancellor, SKUAST Kashmir	(Member Secretary)

The committee convened a series of review meeting in the course of which 30 projects were presented before them of which 28 were cleared, with one being added later during discussions held in a meeting under chairmanship of Hon'ble Lt. Governor of J&K.

I. VISION & MISSION:

Transform J&K's Agricultural Economy as Integrative of Bio-Economy:

- Transform subsistence agriculture into sustainable commercial Agri-economy.
- Emphasis on ecosystem services and, restoration & sustainable utilization of biodiversity to efficiently use bio-resources for food, feed & industry.
- Create agri-business ecosystems with inbuilt functional value chain
- Promote inbuilt risk management through diversification and resilient & smart agricultural practices.
- Adopt farmer- and community-centric approach for holistic development of agriculture.
- Support human resources development for technology backup to sustain and accelerate agricultural transformation.

II. PRINCIPLES:

- Putting agricultural ECONOMY on a new trajectory of growth.
- Ensure EQUITABLE growth of all stake holders.
- Preserve ECOLOGY and Bio Diversity through sustainable & eco-friendly interventions.

III. STRATEGIES:

i. Strengthen "seed" system:

High quality genetic material in all sectors:

a. Crops
b. Horticulture
c. Sericulture
d. Livestock
e. Fish
f. Poultry

ii. Harvest comparative advantage:

Promote unique & niche crops:

a. Medicinal & Aromatic Plants
b. Apple, Saffron, Walnut etc.
c. Trout
d. Wool
e. Basmati

iii. Monetize produce & promote secondary agriculture:

Agri value chain & Post Harvest Management:

a. Agri-logistics
b. Agro-processing
c. Market structure and marketing

iv. Secure livelihood through enhanced jobs and income:

a. Sustainable intensification of agriculture
b. Diversification of agriculture
c. Integrated farming/livelihood systems (IFS/ILS)
d. Conservation agriculture

IV. SWOT ANALYSIS:

✓ **Strengths:**

- Diverse Natural Capital - soil, quality water, biodiversity & micro-climatic variations
- Niche crops
- Supportive-infrastructure
- Educated and qualified human resources.
- Easily scalable R&D and Extension

✓ **Weaknesses:**

- Marginal and fragmented holdings
- Low level of mechanization
- Poor resource use efficiency
- Poor access to institutional credit
- Poor Market structure
- Absence of Value Chain

✓ **Opportunities:**

- Scope for mobilizing farmers– FPOs, SHGs,CIGs. FIGs VPOs etc
- Responsive & progressive farming community
- Comparative advantage in several agri-commodities
- Huge potential for processing
- Unique scope for off-season agriculture
- Pristine production environment -brand value in export market

✓ **Threats:**

- Dwindling natural resources
- Unplanned and irrational Land Use
- Diversion of arable land for non-agriculture purpose
- Increasing biotic and abiotic stress
- Climate change

V. PRESENT CONTRIBUTION TO GDP FROM AGRICULTURE & ALLIED SECTORS:

Sector	Contribution (in Crore ₹)	% age of SGDP	CAGR In UT (%)	
			Current Prices	*Constant Prices*
Agriculture & Allied	37559.00	18.40%	7.92	2.02
Horticulture	15413.00	7.30%	9.36	2.08
Livestock	12634.00	6.05%	8.56	2.97
Agriculture	9512.00	4.55%	5.91	0.59

VI. PROJECTS CLEARED BY THE APEX COMMITTEE:

S. no	Project Name
A.	***AGRICULTURE SECTOR***
1.	Development of Seed and Seed Multiplication chain in PPP mode
2.	Promotion of Niche crops in UT of J&K
3.	Promotion of Vegetables/exotic vegetables under open & hi-tech protected cultivation
4.	Strengthening Agri-Marketing System in UT of J&K
5.	Promotion of medicinal/aromatic plants on commercial basis
6.	Promotion of Apiculture
7.	Technological interventions to strengthen Sericulture in J&K
8.	Promotion of Nutri cereals (Millets)
9.	Farm mechanization and automation
10.	Promotion of mushroom cultivation
11.	Promotion of Oilseeds
12.	Formulation of 300 FPOs
13.	Adoption & promotion of integrate farming system (IFS)/Integrated Livelihood systems (ILS) in UT of J&K
14.	Promotion of commercial floriculture in UT of J&K
15.	Development of rain fed areas of J&K
16.	Alternate Agriculture System for sustainability
17.	Sensor based smart Agriculture

18.	Minimizing pesticide use in Agriculture
19.	J&K soil & land resource information system
20.	Innovative approaches in agriculture extension
B.	***HORTICULTURE SECTOR***
21.	Production of Designer Plants for promotion of HD plants and rejuvenation of orchards
22.	UT level food processing program for development of clusters for specific products of J&K
C.	***LIVESTOCK SECTOR***
23.	Dairy Development in J&K
24.	Reorienting priorities: Self-sufficiency in mutton production in J&K
25.	Roadmap for poultry development in J&K
26.	Technological Interventions for Fish Seed and Trout Production in UT of J&K
27.	Promotion of wool/pelt processing and marketing
28.	Development of fodder resources for UT of J&K
29	*Support to Human Resource Development for Technological backstop for Sustainable and Accelerated Transformation of Agriculture*

VII. OUTPUTS & OUTCOMES OF THE PROJECTS:

- ✓ Recommended **Seed Replacement Rate of 33%** will be achieved by cultivation of 2.596 lakh QTLS of quality seed. The measure will result in production increase between 15%-45% depending on the crop.
- ✓ Boost in production of **Niche crops** by bringing additional 11000 Ha under their cultivation through diversification. 5182 private/public nurseries and 44 seed villages will be established along with GI Tagging and compact value chains. Establishment of one mini-spice park, two modern rice mills and eleven processing & handling units.
- ✓ Self-reliance in **vegetables and boosting production of exotic varieties** for export. The vegetable production will increase from 19.90 lakh to 25.87 lakh MT. New 1100 hi-tech green houses and 3548 polyhouses will be established with an upscaling of cropping intensity to 250%.

- ✓ An intensive network of post-harvest and **marketing** value chains from rural (Business & Service) hubs, reefer vans to mandis, from grading lines to branding centers with integrated 67,000 MT of CA Storage Space shall be created. Dedicated backend market intelligence cell to extend marketing decision support.

- ✓ A new dawn in **Medicinal & Aromatic plant cultivation** – potential output of 750 crores (15 years) shall be achieved. 5000 kanals of land will be brought under cultivation of MAPs, 6 MAP germplasm banks and 2 CFCs will be established.

- ✓ Tripling of **Honey Production** besides Rs 475 crores from value added by-products besides 10 to 15% increase in crop productivity due to increased insect pollinators. 1.43 lakh new bee colonies, 20 CHCs and 2 apitherapy centers shall be established.

- ✓ Doubling of silkworm seed and cocoon production and regaining of J&K's glory as a producer of **high-quality bivoltine silk** with increase in cocoon production from 700 MT to 1350 MT. Ten lakh mulberry plantations and a state of art automatic reeling facility will be established.

- ✓ Focus on climate resilient **millet and nutri-cereals** cultivation on 14,000 ha area in Kandi/Rainfed belts. Doubling of per hectare productivity of millets and establishment of 60 millet processing units.

- ✓ Increase in **farm power** from present 1.74 Kw/ha to 2.5 Kw/ha. Establishment of 283 Custom Hiring Centre & 142 AI & precision farming centers.

- ✓ Diversification in farm income through boost in **cultivation of mushrooms.** Quadrupling mushroom production from 2100 MT to 7800 MT through establishment of 26 pasteurized compost making units & 72 controlled condition cropping rooms and 300 mushroom sheds. Value addition through establishment of 4 Mushroom Canning & pickling Unit.

- ✓ Doubling in production of **Oil seeds** & increasing area under cultivation from 1.4 lakh Ha to 2.1 lakh Ha. 100 Oil seed extraction units will be established for value addition. Increase in per hectare productivity from 800 to 1200 kg.

- ✓ Creation of **300 FPOs** encompassing 3000 farmer interest groups (FIGs) by mobilization of 60 thousand farmers in each block of J&K. Net returns to farmers as a result of collectivization will increase by 10-12%.

- ✓ **Integrated farming** systems, integrated **organic farming** systems & **integrated livelihood** system will be established by involving 85,000 farmer families in drought prone & **rainfed** areas. Enhanced farmer income (1:2.01 CB Ratio), and increased income per hectare by 100%.

- ✓ Harvesting J&K's agro-climatic diversity in cultivation of temperate and other cut **flowers** through boosting cultivation on existing 150 units and creation of new 54 nurseries & 330 production units. Extending flower production on 400 ha bringing total land under flowers to 587 ha.

- ✓ 50% increase in **Fruit Economy** from 10,000 cr/year to 15,000 cr/year. 7500 ha additional area will be brought under fruit cultivation, 11 million plantations created. 200% increase in productivity in existing orchards.

- ✓ 7 **product clusters** in 17 districts handling 20 Lakh MT produce shall be mobilized. 5 Mega Clusters established with grant of Rs 50 crore each. (Milk, Walnut, Meat & poultry, Vegetables and Basmati), One Midi-Cluster (Cherry) with grant of Rs 25 cr & One Mini Cluster (Trout) with grant of Rs 12.5 cr. Net revenue generation of over 1450 cr/yr.

- ✓ **Milk output** will increase by 75% and milk entering processing chain will be tripled. Breeding cover improved from 30% to 70% & conception rate by 10%. Creation of facilities for production of sexed semen within J&K with an aim to replace 50% normal semen with sexed semen. Establishment of 500 village level milk collection units & 50 bulk milk chillers. Village level value addition of 110 lakh liters of milk into traditional products. Per animal milk productivity increased from 2400L PA to 4300L PA.

- ✓ Self-reliance in **mutton** with sustainable **wool & pelt** value chains. Importation of 2700 superior muttonous breeds of sheep. Implementation of ETT & AI programs to intensify genetic improvement and horizontal growth. 300% increase in returns from wool & pelt to further secure livelihood of the traditional sheep & goat farmers.

- ✓ Self-sufficiency in **poultry meat and egg production**. 300 feed production units, 125 integrated hatcheries & 200 big layer farms in private sector. 60 crore eggs and 6500 MT for free-range meat from backyard sector. Prevention of capital flight of 1273 cr/yr.

- ✓ Doubling of **Trout & Carp Production** by introducing fresh germplasm (100 lakh ova imported from outside) with modernization (12) & establishment of new hatcheries (10). Implementation of modern technologies in water management and rearing by establishment of raceways (1100), RAS (500), bio-floc (120). Establishment of fish feed mills (13) four cold storage cum ice production units and four quality-cum-disease control labs.

- ✓ **Fodder Deficit Reduction** by 80% through establishment of farmer demo plots (4100 ha/year), hay-silage units (300), fodder depots (25) and establishment of hydroponic units (500 units with 15,000 MT green fodder output). In addition, generation of 20 lakh MT of fodder from orchards, forest closures & alpine/sub-alpine grasslands.

- ✓ Establishment of 2000 **Kissan Khidmat Centres** (KKCs) for participatory planning and decentralized decision making to promote **remunerative agriculture** at panchayat levels. The KKCs will ensure strong linkage with KVKs, line Departments, and universities for technical support leading to holistic area specific agricultural plan and models, service delivery at farmer doorsteps and impact analysis of schemes.

- ✓ Establishment of 789 **borewells and multi-irrigation** systems (pressurized, rain-guns, micro, gravity feed & drip irrigation systems) over 16 thousand hectares.

- ✓ Establishment of 4875 vermicompost (VC) units at farmers premises and 200 large commercial VC units producing **bio-compost** worth Rs. 800 crores annually.

- ✓ **Pilot Programmes** involving:
  - ❖ *Soil and Land Use Database* for efficient prospective planning to reduce input cost and increase productivity.
  - ❖ Demonstration of innovative futuristic hi-tech agriculture in the form of a *sensor based models*.
  - ❖ Orchard models based on *bio-pesticides and advanced spraying technologies* coupled with web & app-based pesticide use decision making system. Creation of bio-pesticide making units with up to 90% reduction in pesticide use.
  - ❖ *Technological backstopping* by strengthening student and R&D support at agricultural universities.

- ✓ **Gross Achievements**:
  - ❖ Addition of ₹ 28142 Cr to the SGDP of J&K annually.
  - ❖ Creation of 18861 new business enterprises.
  - ❖ Creation of additional jobs to the tune of 2.88 lacs in the Agriculture & Allied Sectors.
  - ❖ Training & capacity building of over 2.0 lac persons in various agri-skills.
  - ❖ Increasing CAGR of Agri & allied sectors to 11.08% from the current 2.02% (2011-12 prices).
  - ❖ Securing livelihood of 13 lakh farm families with particular emphasis on 2.62 lakh marginal families.

VIII. OVERVIEW OF PROJECTS APPROVED:

PROJECT 1. DEVELOPMENT OF SEED AND SEED MULTIPLICATION CHAIN

BACKGROUND:

- Of the several factors vital for enhancing production and productivity of the crops, seed is a critical input for long-term sustained growth of agriculture.
- A robust seed system is the first and foremost step towards food security and acts as driver of growth in agriculture.
- In J&K seed requirement as per Seed Replacement Rate is 3.61 lakh quintals however seed availability is only 1.020 lakh quintals
- The seed deficit of 2.60 lakh quintals as per recommended seed rate is to be produced for achieving growth in the sector.
- Because of the low availability a capital flight of 500 crores occurs annually.
- It is estimated that the direct contribution of quality seed alone to the total production is about 15-20% depending upon the crop and it can further be raised up to 45% with efficient management of other inputs.

INTERVENTIONS:

1. Creation & incentivization of Primary Seep Producers (PSP) & Seed Producing Organizations (SPO) with proper skill development
2. Involvement of Stakeholders in PPP Mode
3. Creation of Efficient Seed Market Chain, community seed banks at block levels & Protected cultivation
4. R&D and Human Resource Development

KEY OUTPUTS:

1. Creation of 500 enterprises involved in seep production (PSPs & SPOs of skilled argipreneurs).
2. A chain of trained 12000 Secondary Seed Producers having seed production contracts with PSP
3. Creation of 20,000 jobs at secondary seed farms.
4. Significant improvisation in Seed Replacement Rate & Varietal Replacement Rate to fulfil required seed deficit of 2.6 lakh quintals as per SRR
5. Seed sufficiency with anticipated addition of ₹ 1892.00 cr to the agricultural economy

KEY OUTCOMES:

1. Creation of a robust seed market chain
2. SRR & VRR at recommended levels
3. HR Development in form of skilled argipreneurs who shall undertake diverse seed development operations including targeting national and overseas markets
4. Conservation of local seed varieties through community seed banks
5. Seed sufficiency and up to 28% improvement in overall returns to farmers

JOBS & ENTERPRISES:

- 20,000 jobs and 500 enterprises will be created in five years

BUDGET: ₹120.86 cr

PROJECT 2. **PROMOTION OF NICHE CROPS**

BACKGROUND:

- Niche corps are cash crops in high demand and owing to the geo-climatic diversity of J&K several such crops e.g., Saffron, Lal Mirch, Basmati, Mushqbudji, Baderwah Rajmash, Kala Zeera, etc are available.
- There is a tremendous prospect for value addition if commercial value chain & traceability is established.
- Another impediment to their extensive cultivation is lack of sufficient planting material.
- Improvement in quantity and quality of the niche produce apart from strengthening of marketing & branding system could increase the income of the farmers by over 200%.

INTERVENTIONS:

1. Production of quality planting material by introduction of registered nursery management system
2. Diversification & area expansion of niche crops by targeting non-traditional areas of J&K in over 11100 ha
3. Value addition & marketing for brand promotion and a compact value chain of niche crops
4. R&D and HRD for GI tag of Niche crops, varietal development, and development of a skilled farmer base

KEY OUTPUTS:

1. Area expansion of Niche Crops over 11100 ha in potential non-traditional temperate areas of UT of J&K
2. Production of 2159 MT of quality seed, 40000 plants and 10 crore seedlings.
3. Setting up of 01 Mini Spice Park, 02 Modern Rice Mills and 11 Processing and Handling Units
4. Establishment of 07 growers' societies for saffron & linking societies with India International Kashmir Saffron Trading Centre (IIKSTC)
5. Convergence with FPOs/Firms/Exporters for trade promotion
6. Training of 6400 argipreneurs in hi-tech farming techniques

KEY OUTCOMES:

1. Development of descriptors & eco-compatible technologies for large scale production of planting material with consistency in quality and quantity to meet Internal and Export market demand
2. Empowerment of entrepreneurs through trainings for intensive cultivation, mechanization of primary processing, product preparation, packing, labeling, shelf life and marketing
3. Beneficiary linkages with FPOs & e-Markets, digital marketing.
4. Economic upliftment of farmers.

JOBS & ENTERPRISES:

- 7,750 jobs and 5210 enterprises will be created in five years.

BUDGET: ₹146.15 cr.

PROJECT 3. PROMOTION OF VEGETABLES & EXOTIC VEGETABLES

BACKGROUND:

- ❖ Vegetable sector has been identified as a key sector for enhancing farmer's income.
- ❖ J&K has a high seasonal dependence on imports to meet vegetable demands.
- ❖ Even during production season farmers suffer from low productivity because of little knowledge of high-tech farming
- ❖ Cultivation of exotic vegetables like broccoli, brussels sprouts, asparagus, lettuce, red cabbage etc. offers a unique opportunity for the vegetable growers of J&K to cater to demands for these vegetables in high end markets.

INTERVENTIONS:

1. Horizontal and Vertical Expansion to improve production and per unit productivity.
2. Promotion of Exotic and High Value Crops.
3. Year-round cultivation of vegetables using hi-tech farming methods.
4. Popularizing precision farming techniques to increase cropping intensity.
5. Research and Development for designing new region-specific methods of vegetable cultivation.

KEY OUTPUTS:

1. 1100 new hi-tech green houses will be established for high value vegetables.
2. 3548 new polyhouses (Vegetable nurseries) for supplying quality planting material.
3. Increase in vegetable production from 1991 to 2587 TMT.
4. Increase in vegetable cropping intensity from 165 to 250%.
5. A surplus of 68 (000' MT) per year from 5th year onwards.

KEY OUTCOMES:

1. Self-reliance in vegetables with potential to export quality & exotic crops.
2. Popularization of hi-tech & precision-based farming.
3. Value addition and market accessibility.
4. Year-round income security for farmers.

JOBS & ENTERPRISES:

- 47,250 jobs and 4648 enterprises will be created in five years.

BUDGET: ₹ 399.62 cr

PROJECT 4. STRENGTHENING AGRICULTURAL MARKETING

BACKGROUND:

- The prevailing agricultural marketing system needs improvement with respect to trading practices to protect the interests of farmers/actual producers.
- To improve the efficiency of agri-marketing ecosystem, enabling infrastructure and logistics in the form of a dependable value chain is imperative.
- A strong marketing linkage shall improve the terms of trade (ToT) in favour of farmers
- Improvement in efficiency and effectiveness of market ecosystem will also minimize the value loss and maximize the farmer as well as consumer welfare.

INTERVENTIONS:

1. Market reforms like open auctions and unified licensing in all mandies of J&K
2. Infrastructure development and year-round functioning of mandies by converting them into Value Chain Parks with provision of infrastructure like grading lines, pack house, CA stores, processing plants, Reefer Vans, SPVs composting facilities etc. Additional mandies in few more districts are also required.
3. Institutional building & capacity development through niche marketing FPOs
4. Branding & market intelligence to promote timely decision making and brand loyalty.

KEY OUTPUTS:

1. 11 CA Stores (65000 MT)
2. 12 Hi-Tech Grading Lines
3. 25 mini cold stores
4. 4 New Mandies (Samba, Reasi, Kishtwar & Bandipora)
5. 400 Rural Business & Service Hubs
6. 2 Agri Branding centres
7. One Market Intelligence Cell

KEY OUTCOMES:

1. Increase in farmers' income by 45% to 90%.
2. Minimize the value loss by 20% to 70%.
3. Improvement in off-season availability of fruits and vegetables
4. Value creation (25% to 75%)
5. Transfer of actual remunerative prices to farmer
6. Reduced food wastage
7. An efficient decision support system
8. Increase in farmers income by 15-20%

JOBS & ENTERPRISES:

- 6000 jobs and 629 enterprises will be created in five years.

BUDGET: ₹ 426.62 cr

PROJECT 5. PROMOTION OF MEDICINAL AND AROMATIC PLANTS (MAPs)

BACKGROUND:

- J&K Himalayas have immense wealth of about 1123 plant species of medicinal and aromatic value.
- Current world herbal trade stand approximately at US$ 120 billion and is expected to reach US$ 7 trillion by 2050.
- The current MAP output from J&K is only ₹ 2.0 lacs as very little cultivation is being done in the sector. Availability is mostly gathering based (from forest areas) with little regard to conservation.
- There is a huge chunk of cultivable wasteland in J&K (139 thousand ha; 3.37%) which has the potential to be brought under MAP cultivation.
- MAPs unique to our agro-climate offer great potential for employment & export.

INTERVENTIONS:

1. Cultivation and conservation of map by cultivation & creation of MAP germplasm banks.
2. Harvesting and post-harvest management involving aggregation of produce from cluster groups of farmers and its primary processing & value addition.
3. Branding and marketing with product diversification, certification, and establishing market linkages and digital marketing.
4. R&D and HRD through establishment of "Centre of Excellence on Herbal Technology" for focused R&D

KEY OUTPUTS:

1. Sectoral growth from Rs. 0.02 to Rs. 74.76 crores (5 year) & potential growth to 783 crores (15 yrs)
2. 1-2 MAP farmer-producer cluster per district (total of 28 clusters)
3. 5000 kanals (253 ha) land under cultivation of MAPs
4. 6 MAP germplasm banks established
5. Establishment of 2 CFCs.

KEY OUTCOMES:

1. Strengthening of agricultural economy
2. Reduced stress on forest biodiversity.
3. Reduced value chain losses
4. Trained manpower & skilled youth (3000)
5. Quality Products, Patents & Designs

JOBS & ENTERPRISES:

- 3,000 jobs and 28 enterprises will be created in five years

BUDGET: ₹61.9 cr

PROJECT 6. **PROMOTION OF BEE KEEPING**

BACKGROUND:

- There is a general diminishing of population of native bees in J&K
- A lack of migration practices among farmers is leading to low quantity & quality of produce
- The current system of rearing is less productive with no mechanism for quality improvement
- Bee numbers have a direct effect on produce from crops requiring cross pollination

INTERVENTIONS:

1. Strengthening & distribution of bee colonies through cluster/SHGS/FPOS
2. Production of nucleus stock and bee breeders
3. Setting up of GI labs
4. Centre of excellence for constancy, capacity building and post-harvest management
5. Research & Development

KEY OUTPUTS:

1. 333% increase in Bee population to 5 lacs (1,43,000 new bee colonies)
2. Tripling of Honey Production from 22000 Qtls to 66100 Qtls
3. Generation of additional Rs 475 crores by sale of by-products
4. 20 CHC for extending pollination facilities
5. Two Api-therapy centres

KEY OUTCOMES:

1. Efficient growth of bee sector using native honeybees
2. Value addition by harnessing potential of by-products
3. Boost in pollination by deploying bee colonies – having spin-off effect on dependent sectors
4. Monitoring & traceability through GI labs
5. Livelihood security for 7,396 farmers

JOBS & ENTERPRISES:

- 8122 jobs and 86 enterprises will be created in five years

BUDGET: ₹ 46.65 cr

PROJECT 7. **PROMOTION OF SERICULTURE**

BACKGROUND:

- ❖ J&K has been known for ages for its high-quality silk produce however, the sector has been showing a shrinkage over the past decade
- ❖ There has been a shortage of quality mulberry leaves for several years now.
- ❖ J&K suffers from low cocoon yield as compared with national averages
- ❖ Shortage of rearing space & inadequate knowledge with farmers has hampered growth over the years.
- ❖ We are deficient in silkworm seed production as well as processing facilities (<30%).
- ❖ Due to poor infrastructure the quality of raw silk produced is sub-par.

INTERVENTIONS:

1. Expansion of area under mulberry plantation.
2. Enhancing the capacity of silkworm seed production
3. Well-equipped and well managed chawki rearing centres (CRCs)
4. Establishment of automatic reeling machine for market linkage

KEY OUTPUTS:

1. 10 Lakh mulberry plants added.
2. Doubling of silkworm seed production from 8 lakh disease free layings (DFLs) to 16 lakh DFLs.
3. Increase in cocoon production from 700 MT to 1350 MT.
4. 100 new chawki rearing centres' (CRS's) for supply of chawki worms to seri-farmers.
5. Increase in silkworm seed intake 7.0 lakh dfls/year.
6. Addition of 7000 new silkworm rearers.
7. Instant market for cocoon produce of 2000 silkworm rearers by establishment of Automatic Reeling Machine (ARM).

KEY OUTCOMES:

1. Regaining of J&K's glory as a producer of high-quality bi-voltine silk
2. Abundant & quality mulberry leaves
3. Improved cocoon yield & productivity.
4. Enhancing silkworm seed production capacity.
5. Value addition of silk & market linkage of sericulture farmers.
6. Instant market for cocoons, International Grade Raw Silk Production within UT
7. Human Resource Development – 15000 farmers (total 34,000 farmers in the sector)

JOBS & ENTERPRISES:

- 7,050 jobs and 1 enterprise will be created in five years.

BUDGET: ₹91.04 cr.

PROJECT 8. **PROMOTION OF MILLETS & NUTRI-CEREALS**

BACKGROUND:

- Millets are photo-insensitive, resilient to climate change and hardy crops that have a low carbon and water footprint.
- Millets can withstand high temperatures and grow on poor soils with little or no external inputs.
- The use of millets is finding favour among manufacturers of infant foods and nutritional products as a result demand is on the rise.
- Millets are dual-purpose crops, cultivated both as food & fodder.
- They were cultivated throughout Jammu & Kashmir in plains as well as in hilly areas during the 1950s & early 60s but were abandoned in favour of wheat, maize, and paddy.
- Currently millet is being cultivated on only 8000 odd hectares in the UT.

INTERVENTIONS:

1. Area expansion, cluster approach & promotion of millets as a resilient crop especially in rainfed & kandi belts
2. Employing best cultivation technologies with improved varieties
3. Promoting millet processing enterprise and establishing market linkage
4. Value addition & branding as smart food

KEY OUTPUTS:

1. Over 8000 ha traditional millet growing areas revived
2. Additional 6000 ha will be brought under millet cultivation (intercropping, mixed-cropping, fallow lands etc)
3. The per hectare productivity of millets shall be doubled (10 to 20 qtls)
4. 60 millet processing units with value chain shall be established
5. 60 millet restaurants serving millet-based food products shall be operationalised

KEY OUTCOMES:

1. Crop diversification in drought prone areas
2. Nutritional security for rural poor
3. Commercialization of millets through health products
4. Sustainable food source for combating hunger in changing climate
5. Strengthening agro-processing of millets

JOBS & ENTERPRISES:

- 6500 jobs and 120 enterprises will be created in five years.

BUDGET: ₹14.58 cr.

PROJECT 9. FARM MECHANIZATION AND AUTOMATION

BACKGROUND:

- ❖ Mechanization in Agri-sector is the biggest contributing factor responsible for improving the production efficiency.
- ❖ The reduction in drudgery is one of the main components of Mechanization and it also helps to reduce the workload of working women.
- ❖ Efficient machinery helps in increasing productivity by 30% besides, enabling the farmers to raise a second crop making the agriculture activity attractive and economically viable.
- ❖ J&K is trailing in farm power with only 1.74Kw/ha (NA 2.5Kw/ha)
- ❖ Inadequate availability of farm friendly equipment, implements & hi-tech machinery

INTERVENTIONS:

1. Custom hiring centres & farm machinery banks
2. Mechanization & automation of agricultural farms
3. Human Resource Development
4. Research and Development to customize and develop machinery for Hilly terrain

KEY OUTPUTS:

1. Increase in farm power from present 1.74 Kw/ha to 2.5 Kw/ha
2. Establishment of 283 Custom Hiring Centre
3. 142 AI & precision farming centres operationalized
4. There will be a 15 - 20% saving in seeds and fertilizers
5. 5 - 25% increase in crop production & crop intensity

KEY OUTCOMES:

1. Prototype production centres
2. Development of region-specific farm machines
3. Reduction in drudgery of farm workers especially women
4. Economize agriculture land use by 15%
5. Employment generation through custom hiring centres and Farm Machinery Banks

JOBS & ENTERPRISES:

- 33600 jobs and 708 enterprises will be created in five years

BUDGET: ₹577.74 cr.

PROJECT 10. PROMOTION OF YEAR-ROUND MUSHROOM CULTIVATION

BACKGROUND:

- ❖ Diversification in any farming system through off farm activities imparts sustainability.
- ❖ Mushrooms are one such component that not only impart diversification but also help in addressing the problems of quality food health and environmental related issues.
- ❖ Traditional cultivation methods being followed in J&K lead to low quality & quantity of produce
- ❖ Unskilled farmers are unable to harness full potential of the mushroom cultivation.
- ❖ Mushrooms are a highly perishable crop as such market linkages are essential to boost farmer confidence

INTERVENTIONS:

1. Introduction of high yielding strains & promotion of medicinal Mushrooms
2. Diversification and modernization of mushroom cultivation& ensuring year-round cultivation of mushrooms-harnessing off season potential
3. Aggregation, PHM, value addition and development of market linkage
4. Skill development of mushroom growers
5. Production & growth
6. Aggregation, PHM, value addition & market linkage
7. Research & Development

KEY OUTPUTS:

1. Establishment of 26 pasteurized compost making units & 72 controlled condition cropping rooms
2. 10 spawn production labs and distribution of 1.5 lac pasteurized compost bags
3. Establishment of 300 Mushroom Sheds
4. PHM by Establishment of 4 Mushroom Canning & pickling Unit, distribution of 60 solar dryers
5. 300 women SHGs shall be organised
6. Skill development of 6600 farmers shall be undertaken

KEY OUTCOMES:

1. 3-4 times increase in mushroom output from 2100 MT to 7800 MT
2. Doubling productivity of Existing farmers & increased return per unit
3. Three times increase in number of growers from 2570 to 6610
4. Empowerment of small, marginal landless farmers & women
5. Ensuring year-round cultivation of Mushrooms-harnessing offseason potential
6. Skilled Mushroom Growers

JOBS & ENTERPRISES:

- 1700 jobs and 768 enterprises will be created in five years.

BUDGET: ₹41.645 cr.

PROJECT 11. **PROMOTION OF OIL SEEDS**

BACKGROUND:

- India is the largest importer of vegetable oils in the world followed by China and USA.
- The total requirement of edible oils in UT is 14.30 lakh quintals, whereas the UT produces only 3.36 lakh quintals. Production is not commiserate with huge demand for edible oils
- There is no availability of a suitable high yielding and hybrid varieties.
- There are poor facilities for marketing and value addition.
- The sector also suffers because of poor oil extraction technology and low efficiency of processing.

INTERVENTIONS:

1. Covering additional 70,000 ha area under oilseed crops through crop diversification.
2. Increase cropping intensity and seed replacement rate.
3. Ensure adoption of improved technology through INM/IPM, micro irrigation etc. with effective market linkages & value addition.
4. Capacity building and entrepreneurship development.

KEY OUTPUTS:

1. 10700 ha area will be brought under cluster cultivation.
2. 72000 ha of existing area shall be covered under INM/IPM
3. 150 deep bore well with sprinkler irrigation systems will be installed.
4. 100 Oil seed extraction units will be established for value addition.
5. Training of 30,000 farmers in oil seed production shall be undertaken.
6. Increase in per hectare productivity from 800 to 1200 kg.

KEY OUTCOMES:

1. Two times output of oil seeds boosting co-produce systems
2. Optimum technology use, INM/IPM farm mechanization, Irrigation etc
3. Branding, marketing linkage and sale of Edible Oils through FPOs
4. Area under cultivation increased from 1.4 lac ha to 2.1 lac ha

JOBS & ENTERPRISES:

- 5000 jobs and 100 enterprises will be created in five years.

BUDGET: ₹31.00 cr.

PROJECT 12. **FORMULATION OF 300 FPOs**

BACKGROUND:

- ❖ Aggregating producers into collectives is one of the best mechanisms to improve access of small producers to investment, technology, and market
- ❖ More than 95% of J&K's farmers are S&M and have little buying & bargaining capacity
- ❖ There are poor agriculture marketing facilities and prevalence of middleman-ship
- ❖ Creation of FPOs will boost integrated, multi-commodity approach aggregation & value addition

INTERVENTIONS:

1. Baseline assessment & mobilization of farmers
2. Formation of FPOs and FIGs
3. Strengthening FPOs to enable multi commodity approach

KEY OUTPUTS:

1. Mobilization of 60K farmers in to 3000 Farmer Interest Groups (All Sectors) and their collectivization in to FPOs
2. The FPOs will cover all blocks of the UT
3. Job creation within backward (6.57 Lakh mandays) & forward linkages (21.90 Lakh mandays) to provide 7800 full time jobs

KEY OUTCOMES:

1. Promotion in specific cluster & better farm planning for crop productivity
2. Net returns to farmers increased by 10-12%
3. Reduction in input cost by 15-20%

JOBS & ENTERPRISES:

- 7800 jobs and 300 enterprises will be created in five years.

BUDGET: ₹142.50 cr.

PROJECT 13. ADOPTION AND PROMOTION OF INTEGRATE FARMING SYSTEM

BACKGROUND:

- ❖ Integrated Farming System (IFS) with greater diversification has better potential of sustainability, long term profitability and climate resilience.
- ❖ Small & Marginal farmers are unable to obtain remunerative returns from their holdings
- ❖ IFS lead to efficient use of fragile & finite resources & cushion farmers from risk of crop failure
- ❖ IFS encompasses sustainable agriculture, livelihood security and mitigation of climate change

INTERVENTIONS:

1. Farmer assessment & human resources development
2. Orientation & capacity building
3. Implementing IFS interventions

KEY OUTPUTS:

1. 20,000 farmers from 20 districts trained in IFS
2. 10,000 ha area under IFS interventions
7. 6 Lakh qtl vermi-compost (value 43 cr)
3. 1.07 cr mandays employment
4. Sequestration of 80,000 MT of CO2 (4.5 lakh trees)

KEY OUTCOMES:

1. Enhanced farmer income (1:2.01 CB Ratio)
2. Increased per hectare productivity (by 100%)
3. Minimize farmer risk owing to system resilience
4. Diversified faming and increased cropping intensity

JOBS & ENTERPRISES:

- 29,000 jobs and 10 enterprises will be created in five years.

BUDGET: ₹22.75 cr.

PROJECT 14. **PROMOTION OF COMMERCIAL FLORICULTURE**

BACKGROUND:

- It has been found that, commercial floriculture has higher potential per unit area than most of the field crops and is therefore a lucrative business.
- The Indian floriculture industry has been shifting from traditional flowers to cut flowers for export purposes. India's total export of floriculture was Rs. 771.41 crores in 2021-22.
- J&K uniquely positioned to cater to the increasing demand for temperate flowers
- J&K has an insignificant contribution in the 15000-crore national floriculture sector
- Huge potential for employment generation exists in J&K given its geo-climatic diversity

INTERVENTIONS:

1. Up-gradation/capacity building of existing nurseries including post-covid revival of sick/closed units
2. Area expansion by clusterization in nurseries, protected cultivations of cut-flowers and aromatic & ornamental crops.
3. Capacity building & aggregation

KEY OUTPUTS:

1. 54 nursery units upgraded
2. 150 units re-operationalize
3. Additional 400 ha area under cultivation (total 587 ha)
4. 330 new enterprises created
5. 2000 new growers in aromatic flower & bulb/seed production
6. Over 27 crore ornamental nursery plants annually
7. 1200 L of Lavender annually (4 times growth)
8. Skilling of 4000 growers in cluster mode

KEY OUTCOMES:

1. Move towards commercial agriculture
2. Skilled manpower to enhance sectoral growth
3. Doubled output of existing farms by technology and capacity upgrades

JOBS & ENTERPRISES:

- 2,000 jobs and 330 enterprises will be created in five years.

BUDGET: ₹38.95 cr.

PROJECT 15. **RAINFED AREA DEVELOPMENT**

BACKGROUND:

- ❖ Rain-fed areas are ecologically fragile and hence vulnerable to climate change, and they are also largely inhabited by poorer farmers.
- ❖ In J&K over 50% of cultivable land is rainfed.
- ❖ Rainfed areas generally produce poor crops, have low livestock productivity & quality of produce thus agriculture in these areas is largely subsistence type. The surplus farm produce is sold only if family requirements are met.
- ❖ Due to its low absorption capacity rainfed area receives disproportionate government support.
- ❖ To improve production and thus rural livelihoods in rainfed areas, rainfall-related risks need to be reduced, which entails investments in water management and integrated livelihood systems to unlock the potential in rainfed agriculture.

INTERVENTIONS:

1. Deploying climate resilient & nutritionally smart crop varieties and improved breeds
2. Minimizing soil degradation through agroforestry-based approaches
3. Promoting IFS/ILS which encourages system-based productivity
4. Improving access to institutional credit
5. Comprehensive insurance provision

KEY OUTPUTS:

1. 5500 No's of Integrated Livelihood Systems (ILS) shall be strengthened.
2. 55000 farmer families in RA shall benefit from interventions.
3. Skilled Human Resource of 15000 (unemployed educated)
4. 30 Th Ha area will be developed as per agroforestry interventions
5. Microfinancing through existing SHGs

KEY OUTCOMES:

1. Creation of livestock farming units & maximizing AI/Health coverage.
2. Increase in cropping intensity by two-fold
3. High system-based productivity
4. Creation of local jobs & supplementary incomes
5. Scalable post-harvest handling & Agro-processing facilities
6. Brand promotion and commercial value chain development
7. Skill enhancement

JOBS & ENTERPRISES:

- 10,650 jobs and 265 enterprises will be created in five years.

BUDGET: ₹166.25 cr.

PROJECT 16. ALTERNATE AGRICULTURE SYSTEM FOR SUSTAINABILITY

BACKGROUND:

- Social, economic, and environmental sustainability are closely intertwined and necessary components for a truly sustainable agriculture.
- Thus, sustainable agriculture integrates three main goals – ecological health, economic profitability, and social equity.
- There is a growing demand for alternate/organic produce in a health-conscious society.
- J&K has several remote pockets that are using traditional cultivation methods and produce from the areas can easily be converted and branded as organic to fetch higher returns.
- There are also some crops where the use of inorganic inputs is negligible as such can be easily brought into the organic value chain.
- Organic produce is sustainable & safe.

INTERVENTIONS:

1. Area expansion in cluster approach under organic cultivation & default areas.
2. Bio- input production & recycling of resources.
3. Facilitation in certification & marketing of organic produce.
4. Training & capacity building to develop skills and know-how of organic farming.

KEY OUTPUTS:

1. 5 clusters per district (total 2000 ha under organic cultivation).
2. Additional 2000 ha in default organic areas and niche corps.
3. 10,000 farmer families shall be trained in organic farming.
4. 200 Comm & 3000 low-cost Vermicompost units (Rs 103cr/yr output).
5. 100 Integrated Organic Farming System Units.
6. 2 Bio-Input Production Units (R&D).
7. Organic value chain increase from 92-143%.

KEY OUTCOMES:

1. Bio- Input Production
2. Certification and Branding
3. Value/ Market Chain
4. Skilled manpower
5. Clean & sustainable environment, inputs and food

JOBS & ENTERPRISES:

- 12,608 jobs and 302 enterprises will be created in five years.

BUDGET: ₹84.00 cr.

PROJECT 17. **SENSOR BASED SMART AGRICULTURE (Pilot)**

BACKGROUND:

- ❖ Sensor base IOT and automation increases resource use efficiency.
- ❖ There is reduction in cost of production irrigation, fertigation, and agrochemical.
- ❖ Responsive and precise farming has potential to increase crop intensity up to 300%.
- ❖ Smart farming techniques reduce post-harvest losses within the complete value chain.

INTERVENTIONS:

1. R&D for capacity building towards smart agriculture
2. State of art sensor based high tech protected cultivation
3. Sensor based pilot study on high density apple cultivation
4. Sensor based pilot study on protected cultivation of vegetable
5. IoT based monitoring of livestock

KEY OUTPUTS:

1. R&D ecosystem in sensor-based operation
2. Skilled manpower in IoT and automation
3. Precise management of irrigation and fertilization for apple and other crops
4. Precise monitoring of disease and pests
5. Evaluation of effectiveness of better management strategies

KEY OUTCOMES:

1. Reduction in nutrient and pesticide use by 50% through increased efficiency
2. Effective disease and pest management
3. Reduced cost of production
4. Start-ups in sensor-based automation

JOBS & ENTERPRISES:

- 2600 jobs and 190 enterprises will be created in five years.

BUDGET: ₹30.40 cr.

PROJECT 18. MINIMIZING PESTICIDE USE IN AGRICULTURE (Pilot)

BACKGROUND:

- While the credits of pesticide use include enhanced economic potential in terms of increased production of food and fibre, but their debits have resulted in serious health implications to man and his environment.
- In J&K utilizes pesticides are largely used in the fruit sector followed by paddy & wheat.
- Over 55% of production costs in fruit sector is being spent on protection of crops.
- Minimizing pesticide use is one of the pre-requisites for increasing product suitability towards export & organic standards.

INTERVENTIONS:

1. Development of cluster-based model orchards.
2. Identification of disease resistant varieties of crops.
3. Developing, validating & demonstrating efficient decision support system on pesticide use.
4. Popularizing & adoption of advanced spraying technologies & bio-pesticides.
5. Estimating pre-harvest interval for developing safe food.

KEY OUTPUTS:

1. 10 Cluster model HDP orchards employing minimal pesticides.
2. 20 Custom Hiring centres for advanced spraying machines
3. 100 Agri-entrepreneurs will be trained in for Bio-Pesticide Production
4. Estimation of PHI for 23 pesticides recommended in apple (pre-harvest interval)
5. 200 orchards in cluster & 1000 orchards with advanced spraying facilities

KEY OUTCOMES:

1. Safer environment, food & human health.
2. Demonstration of 90% reduction in pesticide usage.
3. 20-40% reduction in input costs.
4. Quality & safe fruit production suitable for exports.
5. Web/App based database for farmer guidance in pesticide use decision making.

JOBS & ENTERPRISES:

- 1500 jobs and 100 enterprises will be created in five years.

BUDGET: ₹27.00 cr.

PROJECT 19. SOIL AND LAND RESOURCE INFORMATION SYSTEM AND SOIL HEALTH MANAGEMENT

BACKGROUND:

- Decision on crop diversification and soil suitability require a firm scientific basis
- Unscientific land conversions lead to poor output & enterprise failure
- There has been a rampant decline in soil health due to poor managemental practices
- Ignorance among farmers about sustainable soil health is a challenge in boosting productivity

INTERVENTIONS:

1. Evaluation of crop – land suitability
2. Capturing soil profile data
3. Site-specific soil health assessment
4. Human resources development

KEY OUTPUTS:

1. Data for 4 districts with resolution up to panchayat levels
2. Creation of an intensive soil map at 1:10000 scale
3. Deployment of a web-based soil information system
4. Creation of 6 soil testing laboratories in each district – total 24 (4 block level & 2 district level)
5. 200 argipreneurs shall be trained in soil health testing for establishing private testing labs

KEY OUTCOMES:

1. Authentic soil and land resource repository with development of a comprehensive soil museum.
2. Land evaluation for crop suitability and alternate land use.
3. Efficient use of fertilizers and micro-nutrients (INM) saving precious resources.
4. Policy document on agriculture and urbanization for sustainable ecosystem.
5. Up to 10% increase in land productivity

JOBS & ENTERPRISES:

- 1000 jobs and 200 enterprises will be created in five years.

BUDGET: ₹92.95 cr.

PROJECT 20. INNOVATIVE EXTENSION APPROACHES FOR PROMOTING AGRICULTURE

BACKGROUND:

- A robust technology enabled agricultural informatics, AI based analysis and reporting system with real time farmer-extensionist interface shall constitute the basis of strategic planning for a proactive agriculture extension system.
- J&K has diverse farming clientele with discrete operation of schemes and services
- There is a wide ***extension-worker: farmer*** ratio & poor contact intensity.
- Lack of business orientation & poor ICT/IoT Intervention has a bearing on farming skills and farmer compliance.

INTERVENTIONS:

1. Panchayat level common service centre (Kissan Khidmat Garh)
2. Block level Agri-Extension Advisory Committee
3. KVK as convergence hub at District level
4. Community Radio Station
5. Production Studio
6. Capacity Building & Skill Development
7. Agri -Business Consultancy Hub
8. Participatory Research in Extension

KEY OUTPUTS:

1. 2000 Kissan Khidmat centers for Coordination and Convergence
2. Farmers Database and MIS portals, e-informatics, smart phone applications
3. High quality agri-extension / technology documentaries
4. SKUAST outreach at grass root
5. Future ready Extension Functionaries & skilled HR
6. Secondary agriculture and market linkage
7. Impact Assessment

KEY OUTCOMES:

1. Holistic area specific agricultural plan and models
2. Services at farmers doorsteps along the value chain
3. Self-employment of 2000 Youth
4. KVKs as resource centre for end-to-end solutions
5. Real-time agro-advisories and seamless knowledge / technology transfer and intensified outreach
6. Enhanced Entrepreneurship and Employment generation

JOBS & ENTERPRISES:

- 2000 jobs and 2000 enterprises will be created in five years.

BUDGET: ₹462.80 cr.

PROJECT 21. PROMOTION OF HIGH-DENSITY PLANTATION AND REJUVENATION OF ORCHARDS

BACKGROUND:

- Horticulture plays a vital role in the economic development of J&K.
- J&K's vast resource base has allowed it to develop land for cultivating major horticulture crops including apples, apricots, cherries, pears, plums, citrus, litchi, papaya, mulberry, pomegranate, guava, almonds, saffron, tulips, and walnuts.
- J&K's share in the overall apple production in India was 71%, with the overall production of apples reaching around 2.02 million metric tonnes (MMT).
- Yet J&K has a huge dependence on import of HD plantation material (90%)
- Importation of planting material also introduces new pests and diseases
- Mixing of varieties also occurs due to lack of identification
- Various schemes to boost HD plantation in the UT, are not picking up due to dearth of planting material

INTERVENTIONS:

1. Production of elite planting material
2. Mechanization, automation & protected cultivation
3. Rejuvenation of orchards
4. Capacity building

KEY OUTPUTS:

1. 7500 ha additional area shall be brough under fruit cultivation.
2. 11 million plantations created.
3. 200% increase in productivity in existing orchards
4. Establishment of 6 plant material testing and micro-propagation labs
5. 200 new enterprises (Nurseries)

KEY OUTCOMES:

1. Employment generation
2. R&D for certification, quality testing, diagnostic & micro-propagation
3. Self-reliance in plantation material
4. Training & skill development of farmers

JOBS & ENTERPRISES:

- 25000 jobs and 200 enterprises will be created in five years.

BUDGET: ₹ 281.34 cr.

PROJECT 22. FOOD PROCESSING & DEVELOPMENT OF CLUSTERS FOR SPECIFIC PRODUCTS OF J&K

BACKGROUND:

- In J&K 20% of the total fruit produced gets wasted due to non-availability of packaging & processing facilities and mismatch between production and post-harvest management.
- The post-harvest losses generally ranging from 15-20% are largely due to inadequate infrastructure, poor storage, transportation, electricity, marketing support and limited brand strength.
- Quality Management/Testing/ Accreditation arc also critical factors for processed foods and J&K lacks facilities for the same.
- J&K has inadequate infrastructure for processing & value addition, hence full benefits of clusterization cannot be realized.
- If implemented a wide range of agri-produce can be made lucrative for which there is an existing proof of concept.

INTERVENTIONS:

1. Pre-production and production vertical can be implemented in convergence with line departments
2. Interventions in post-harvest management and value addition vertical for the identified products
3. Interventions in logistics, marketing and branding vertical

KEY OUTPUTS:

1. 7 products in 17 districts in clusters
2. 20 Lakh MT produce shall be handled
3. 5 Mega Clusters established with grant of Rs 50 crore each. (Milk, Walnut, Meat & poultry, Vegetables and Basmati)
4. One Midi-Cluster (Cherry) with grant of Rs 25 cr
5. One Mini Cluster (Trout) with grant of Rs 12.5 cr
6. 2% additional produce entering food processing & Value addition

KEY OUTCOMES:

1. 20+ Lakh Farmers/Farm Operating Families (FoFs) benefit
2. Dynamic Food Processing, Food Packaging and storage Infrastructure
3. Farm level logistics and transportation
4. Marketing Infrastructure and Cluster Branding (GI tagging)
5. Expected Revenue generation to the tune of Rs. 1436.04 cr in a span of 04 years

JOBS & ENTERPRISES:

- 7030 jobs and 34 enterprises will be created in five years.

BUDGET: ₹293.25 cr.

PROJECT 23. **DAIRY DEVELOPMENT IN J&K**

BACKGROUND:

- ❖ Dairy is considered as an effective tool for improving the socio-economic conditions of rural masses particularly for small, marginal and landless farmers.
- ❖ Dairying plays a significant role in improving rural livelihood and is considered as the engine of a sustainable and integrated agricultural system.
- ❖ J&K has a large dairy population however its productivity is fairly low.
- ❖ In terms of AI only 30% of the dairy animals are being provided breeding coverage
- ❖ Due to shortage of heifers around 20,000 dairy animals of unknown genetic merit are being imported every year
- ❖ Only 3-4% milk enters organized processing (national avg. 35%) and value chains for milk processing especially at village levels are lacking.

INTERVENTIONS:

1. Enhancing milk production by strengthening grassroot dairy
2. Augment milk chilling & processing capacity
3. Strengthen marketing & value addition

KEY OUTPUTS:

1. Increase in AI centres from 1389 to 2189 through 800 Private AI workers.
2. Doubling output from Semen Stations (9 to 19 lacs doses PA).
3. Implementing local production of sexed semen straws - 50% of total annual doses.
4. Creation of 400 satellite heifer rearing units.
5. Establishment of Murrah Buffalo Breeding Farm.
6. Installing 500 Automatic Milk Collection Units at Village levels.
7. Installing 50 Bulk Milk Coolers of 5000L capacity each.
8. Bringing 500 SHGs/FPOs under milk umbrella.
9. 110 lakh ltrs additional milk shall be value added at village levels every year through SHGs.

KEY OUTCOMES:

1. 70% dairy cows will be brought within breeding coverage
2. Annual milk production increased from 26 LMT to 44 LMT
3. Per Animal Productivity from 2400L PA to 4300L PA
4. 4 times increase in Milk Collection & Chilling from 2 lakh to 8.5 lakh L PD
5. Organised processing increased from 2 lakh to 8.5 lakh LPD (7%)

JOBS & ENTERPRISES:

- 15700 jobs and 600 enterprises will be created in five years.

BUDGET: ₹370.51 cr.

PROJECT 24. REORIENTING PRIORITIES: SELF-SUFFICIENCY IN MUTTON PRODUCTION IN J&K

BACKGROUND:

- At the national level, J&K ranks sixth, in sheep farming. It holds 4.2 % of the sheep population, producing 320 lakh kgs of mutton per annum.
- The UT is one of the leading consumers of mutton in the country but is still dependent on imports to meet domestic demand.
- Around forty percent of the demand is met through imports and approximately mutton worth fourteen hundred crore is imported annually from neighbouring states.
- The UT has a smaller number of sheep breeds; predominant breeds produce wool with less priority on mutton production.
- A wide of gap 225 lacs kg/year between the demand and supply of mutton in J&K
- No system in place to identify and utilize elite males and females in breed development programs.

INTERVENTIONS:

1. Vertical upgrade through import of muttonous breeds
2. ETT & AI using breed-based farms
3. Horizontal expansion through new commercial farms
4. Health cover & nutrition with a focus on prophylaxis
5. Marketing & value addition with clusterization, CFCs, mandis, abattoirs
6. R&D, HRD & knowledge partners (MoU)

KEY OUTPUTS:

1. 2700 elite sheep & goats shall be imported for upgradation of local livestock.
2. Marketable weight shall be achieved in half the time (40-50 Kg) /6 mo
3. Lambing% will increase from 80 to 120
4. Elite germplasm propagation through ETT (1000/year)
5. 1,00,000 AIs every year to intensify upgradation activities
6. 72 new breed-based farms to select elite germplasm.
7. New 400 commercial farms every year (5-year)
8. 50 enterprises including 10 new abattoirs integrated with sheep mandis (10) & CFCs (50)

KEY OUTCOMES:

1. Farm income doubled with early weight gain
2. Improved carcass yield; increment in production by 18-32%
3. Mutton production boosted through farms
4. Extension of breeding cover to all animals
5. Reduction in lamb mortality
6. Effective health cover preventing production losses by 20-30%
7. Quality and safe meat for consumers and higher returns for farmers

JOBS & ENTERPRISES:

- 6000 jobs and 122 enterprises will be created in five years.

BUDGET: ₹ 329.50 cr.

PROJECT 25. **ROADMAP FOR POULTRY DEVELOPMENT IN J&K**

BACKGROUND:

- ❖ Jammu and Kashmir consumes 121 crore eggs and 7.4 crore kgs of poultry meat annually.
- ❖ There is a huge deficit of 50% in poultry meat & 80% in egg which is mostly met through imports entailing a flight of capital to the tune of 1273 cr/year
- ❖ Even the local production relies mostly on import of critical inputs

INTERVENTIONS:

1. Broiler day-old chick production.
2. Commercial feed manufacturing.
3. Egg production through commercial and backyard/free-range farms.

KEY OUTPUTS:

1. 35 feed manufacturing units shall be established.
2. 125 breeder farms cum hatcheries will be created.
3. 200-layer farms of 10000 capacity will be created in commercial sector.
4. One crore poultry shall be reared under backyard & horti-poultry systems. producing 60 crore eggs & 6500 MT of free-range meat.

KEY OUTCOMES:

1. Reduced import of inputs.
2. Increased profit margins to farmers.
3. Cheaper poultry & poultry products.
4. Will pave way for integrators and optimise contract-based farming.

JOBS & ENTERPRISES:

- 4250 jobs and 420 enterprises will be created in five years.

BUDGET: ₹248.2 cr.

PROJECT 26. TECHNOLOGICAL INTERVENTIONS FOR FISH SEED AND TROUT PRODUCTION IN UT OF J&K

BACKGROUND:

- J&K has a dynamic fisheries sector in the form of Trout Culture, Farm Fisheries, Sport Fisheries, Reservoir Fisheries and other allied activities.
- There however, exists a huge gap between demand and production of fish.
- The seed production and rearing activity is plagued by age old infrastructure and inbreeding depression in stocks
- Absence of modern technologies makes the sector vulnerable to changes in water availability.

INTERVENTIONS:

1. Import of genetically improved variety of fish seed
2. Establishment & upgradation of the hatcheries/fish rearing units
3. Establishment of new hatchery units in clusters mode
4. Production & post-harvest management

KEY OUTPUTS:

1. 100 lakh eyed ova imported from Europe
2. Seed Production increased from 15 -30 million (Trout) & 62 to 100 million (Carp)
3. 10 new hatcheries & 12 modernized
4. Construction of 1100 raceways
5. Construction of 500 (RAS) & 120 biofloc
6. 4 cold-storage cum ice plants
7. Four (4) Disease/Quality Testing labs
8. 13 new fish feed mills

KEY OUTCOMES:

1. Availability of good quality seed throughout the year
2. Judicious use of land & water resources
3. 30% reduction in cost of seed and 35% increase in survival rate
4. Double fish production (Trout additional =1700 tonnes, Carps additional= 1200 tonnes)
5. 100% increase in farmer income
6. Increase in shelf life & reduction in post-harvest losses (28%)

JOBS & ENTERPRISES:

- 6050 jobs and 150 enterprises will be created in five years.

BUDGET: ₹176.06 cr.

PROJECT 27. PROMOTION OF WOOL/PELT PROCESSING AND MARKETING

BACKGROUND:

- ❖ Wool and pelt offer opportunities for greater livelihood security of sheep & goat farmers in J&K however, due to the low market & industry linkages the breeders fail to realize potential revenues.
- ❖ J&K produces the finest wool in country however, production is predominantly in unorganized sector.
- ❖ The sector has a potential to add more than 135 crores to the small ruminant sector every year.
- ❖ Huge potential for value addition by creation of processing & marketing infrastructure.

INTERVENTIONS:

1. Collectivization and integration of wool
2. Creation of common facilitation centres
3. Revival of wool board
4. HRD and R&D

KEY OUTPUTS:

1. Three times income to farmers from wool/pelt
2. 40 FPOs involved in aggregation & processing of wool & pelt
3. 20 CFC will be integrated with FPOs for extending primary processing facilities

KEY OUTCOMES:

1. Greater livelihood security for sheep farmers
2. Boost to wool processing industry
3. Conservation & branding of ITK's
4. Employment and Income generation

JOBS & ENTERPRISES:

- 1250 jobs and 40 enterprises will be created in five years.

BUDGET: ₹64.20 cr.

PROJECT 28. DEVELOPMENT OF FODDER RESOURCES FOR UT OF J&K

BACKGROUND:

- The total fodder requirement of J&K's cattle/buffalo and sheep/goat population is 96.425 Lakh tons and 33.069 lakh tons per year, respectively.
- Feed & Fodder constitutes 75% of production cost.
- UT has a net deficit of 41% in feed & fodder which limits livestock productivity.
- Rapid urbanization will further reduce fodder availability creating a crisis in L/S sector.
- There has been a degradation of grazing lands and pastures.

INTERVENTIONS:

1. Feed & fodder production, processing, and value addition incentives
2. Innovation in green fodder production
3. Genetic improvement of fodder crops
4. Horti-silivi-pastoral systems & grasslands

KEY OUTPUTS:

1. Farmer demo plots on 4100 ha/year
2. Establishment of 300 hay-silage units
3. New 25 fodder depots created
4. Creation of 500 hydroponic units (15,000 MT green fodder output)
5. Cultivation of 15 lac MT of fodder (15% of deficit) from 60,000 ha orchards
6. Cultivation of 3.75 lac MT of fodder from forest closures (25,000 ha)
7. Additional 100,000 MT of fodder from alpine/sub-alpine grasslands (20,000 ha)

KEY OUTCOMES:

1. Promotion of improved early maturing varieties climate resilience & high yield/biomass
2. Adoption of Hi-tech hydroponics farming models
3. Optimum land use at orchards
4. Improvement of grasslands (sub-alpine & alpine)
5. Farmers HRD
6. Reduction of fodder deficit by 80%

JOBS & ENTERPRISES:

- 7500 jobs and 800 enterprises will be created in five years.

BUDGET: ₹129.05 cr.

PROJECT 29. **SUPPORT TO HUMAN RESOURCE DEVELOPMENT FOR TECHNOLOGICAL BACKSTOP FOR SUSTAINABLE AND ACCELERATED TRANSFORMATION OF AGRICULTURE**

BACKGROUND:

- There is a need to support education and research of agricultural universities by retaining/attracting meritorious graduates.
- Continuous support in terms of contingency grants to catalyze the infrastructure/project capital.
- Orient & Motivate students for agri-entrepreneurships & start-ups.
- Ensure that regional priorities in education and research are met.

INTERVENTIONS:

1. Constitution of Vice Chancellors Flexi Grant.
2. Extension of Scholarships to Masters & PhD Students

KEY OUTPUTS:

1. Sustained support for priority R&D initiatives and innovations.
2. 18100 highly motivated and skilled postgraduates in various agricultural fields.

KEY OUTCOMES:

1. Next Gen Leaders in agriculture who shall create a knowledge based and tech-driven agriculture to drive and sustain JK as model bioeconomy
2. Making universities an idea bank of innovations, patents, and commercialized technologies

BUDGET: ₹ 95.25 cr

IX. BUDGET (2022-23 to 2027-28)

TOTAL BUDGETARY REQUIREMENT: ₹5012.74 Cr.